A

```
                                                          25
                                                          ________________________________________________________________________
BVDV-1 CP7-9A          GUAUACGAGG UUAGGCAAG. .UUCUCGUAU ACAUAUUGGA CACUCUAAAA AAAAAUAAUU AGGCCUAGGG GACAAAAAUC CUCCUUAGCG AAGGCCGAAA 98
       Osloss     (AU) GUAUACGAGA AUUUGCCUA. .ACCUCGUAU ACAUAUUGGG CAUUCUAAAA A...UAAAUU AGGCCUAAGG GACAAA..UC CUCCUUAGCG AAGGCCGAAA 93
       NADL            GUAUACGAGA AUUAGAAAAG GCACUCGUAU ACGUAUUGGG CAAUUAAAAA ..UAAUAAUU AGGCCUAGGG AACAAA..UC CCUCUCAGCG AAGGCCGAAA 96
CSFV   Alfort-T        GUAUACGAGG UUAGCUCU.. .UUCUCGUAU ACGAUAUUGG AUACACUAAA ..UUUCGAUU UGGUCUAGGG CAC....... CCCUCCAGCG ACGGCCGAAA 88
       Brescia         GUAUACGAGG UUAGUUCA.. .UUCUCGUGU ACAUGAUUGG ACAAAUCAAA A.UCUCAAUU UGGUUCAGGG CCU....... CCCUCCAGCG ACGGCCGAGC 90
BDV    X818            GUAUACGGGA GUAGCUCA.. .UGCCCGUAU ACAAAAUUGG AUAUUCCAAA A..CUCGAUU .GGGUUAGGG AG.......C CCUCCUAGCG ACGGCCGAAC 87
BVDV-2 890             GUAUACGAGA UUAGCUAAA. GUACUCGUAU ACGGAUUGGA CGUCGACAAA .CUUUGAAUU GGCAACACAG GGAACCU..U CCCCUCGGCG AAGGCCGAAA 96
                       ******* *    *           * *** * **    * *         ***          ***  *   *  *         *      *         *** * ******
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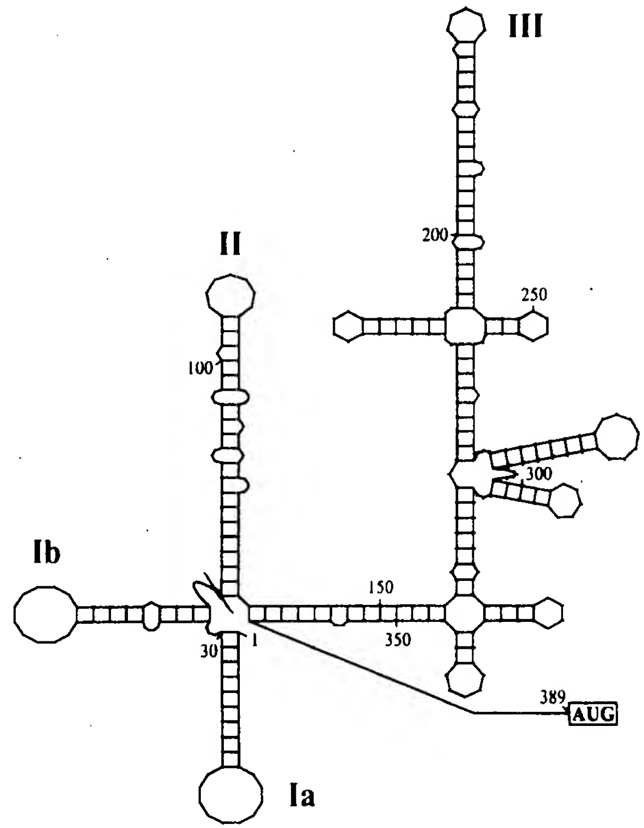


B

Figure 1

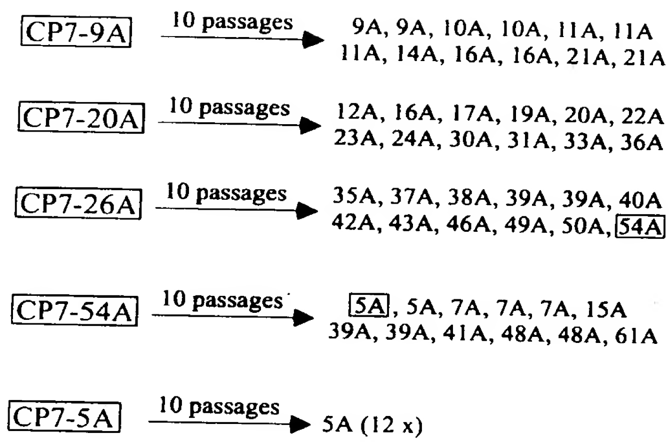
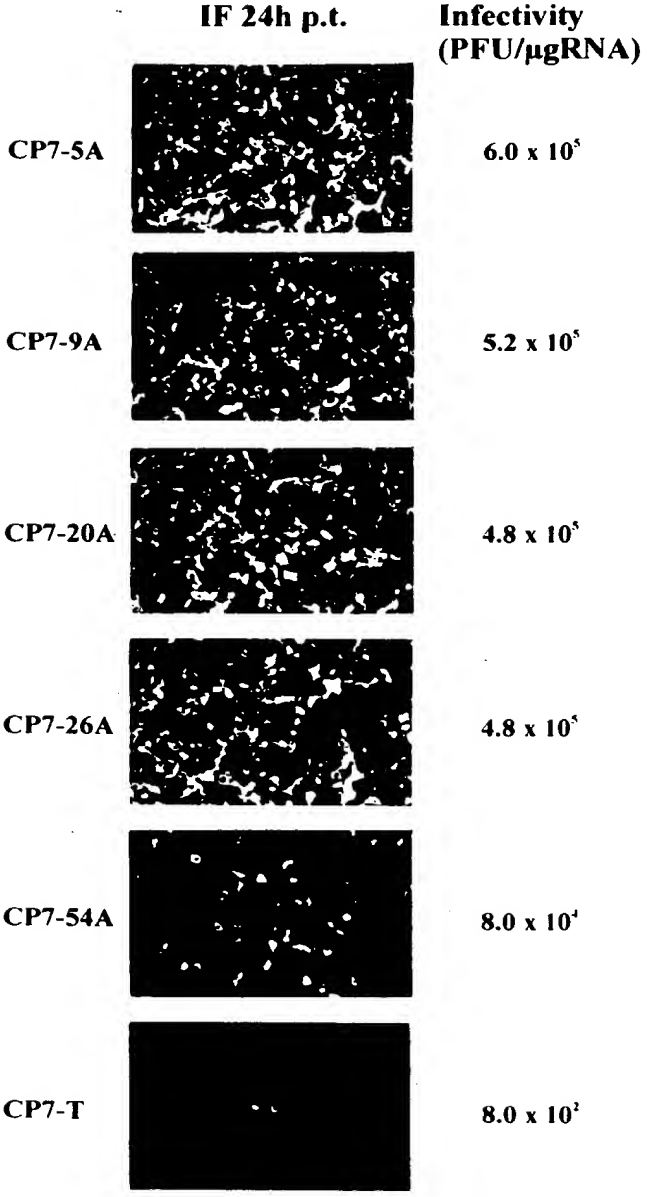

CP7-9A
10 passages
9A, 9A, 10A, 10A, 11A, 11A
11A, 14A, 16A, 16A, 21A, 21A
CP7-20A
10 passages
12A, 16A, 17A, 19A, 20A, 22A
23A, 24A, 30A, 31A, 33A, 36A
CP7-26A
10 passages
35A, 37A, 38A, 39A, 39A, 40A
42A, 43A, 46A, 49A, 50A, 54A
CP7-54A
10 passages
5A, 5A, 7A, 7A, 7A, 15A
39A, 39A, 41A, 48A, 48A, 61A
CP7-5A
10 passages
5A (12 x)

Fig. 2

Figure 3



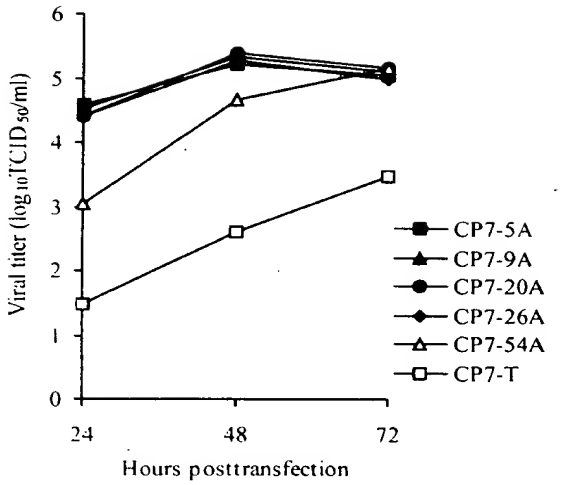
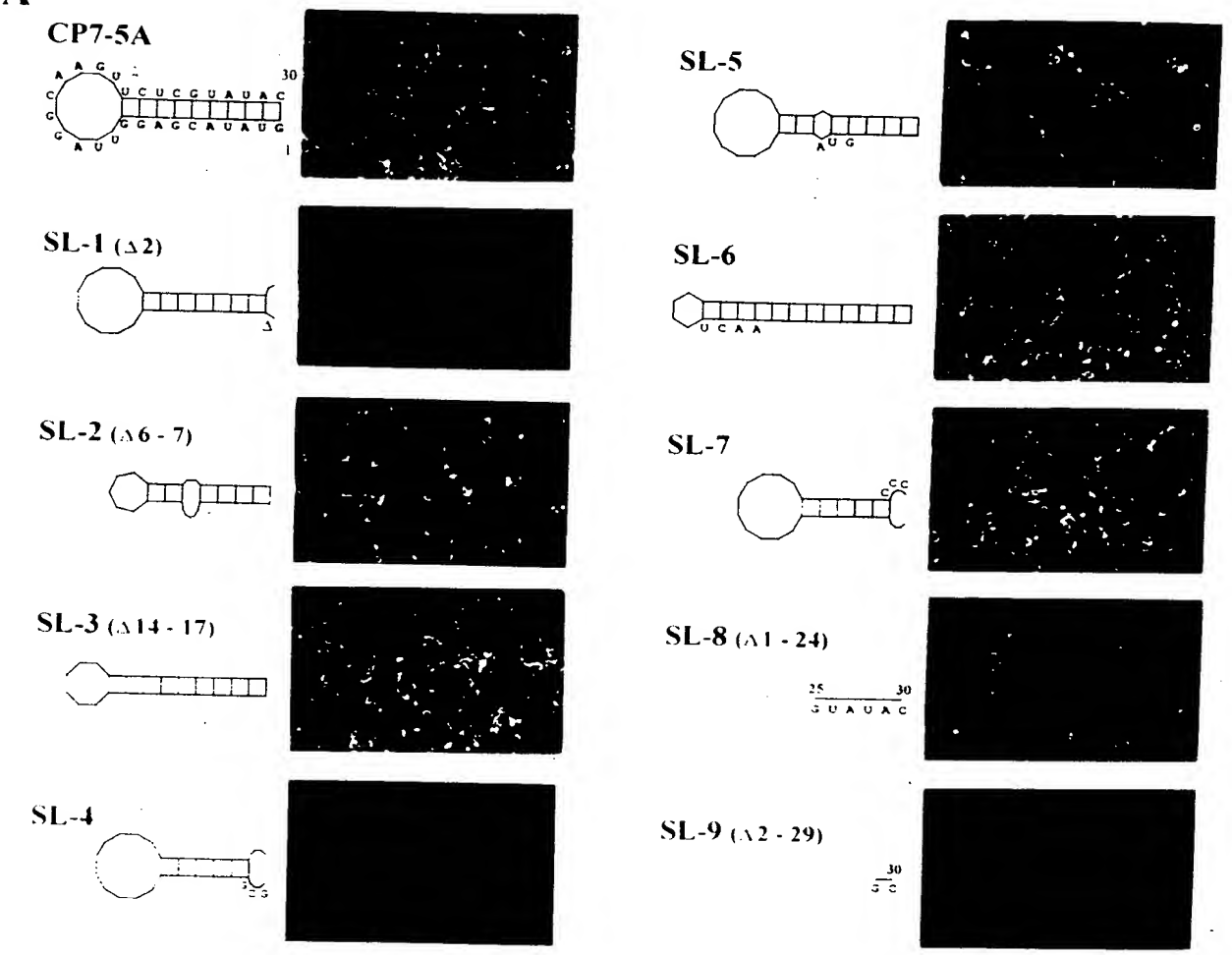

Viral titer ($log_{10}TCID_{50}$/ml)
6
5
4
3
2
1
0
24
48
72
Hours posttransfection
CP7-5A
CP7-9A
CP7-20A
CP7-26A
CP7-54A
CP7-T

Fig. 4

A



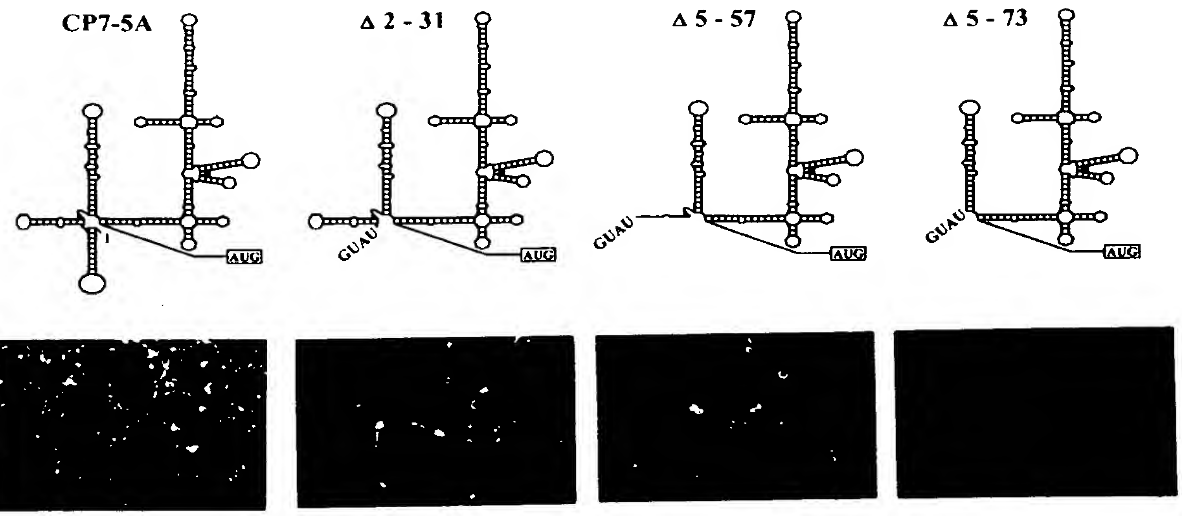
B

	CP7-5A	SL-1	SL-2	SL-3	SL-4	SL-5	SL-6	SL-7	SL-8	SL-9
Infectivity (PFU/μg RNA)	2.4×10^5	4.4×10^1	2.8×10^4	4.0×10^4	< 10	6.0×10^4	6.4×10^4	4.8×10^4	5.2×10^3	6.4×10^2
$TCID_{50}$/ml 24 h p.t.	4.3×10^4	< 10	2.1×10^3	4.8×10^3	< 10	7.1×10^2	5.5×10^3	3.7×10^3	2.1×10^2	< 10
48 h p.t.	1.5×10^5	4.5×10^1	1.3×10^5	7.3×10^4	1.4×10^2	6.6×10^4	1.3×10^5	8.6×10^4	6.3×10^3	4.7×10^2
72 h p.t.	1.3×10^5	2.1×10^2	1.7×10^5	1.3×10^5	4.1×10^2	2.2×10^5	1.5×10^5	1.3×10^5	2.1×10^4	4.2×10^3

Fig. 5

Best Available Copy

A



B

C

	CP7-5A	Δ 2 - 31	Δ 5 - 57	Δ 5 - 73
Infectivity (PFU/μg RNA)	2.4×10^5	6.0×10^3	1.0×10^4	2×10^1
$TCID_{50}$/ml				
24 h p.t.	5×10^4	5.4×10^2	5.4×10^2	< 10
48 h p.t.	1.3×10^5	2.5×10^4	8.4×10^3	2.1×10^2
72 h p.t.	1.5×10^5	9.6×10^4	6.3×10^4	2.1×10^2

D

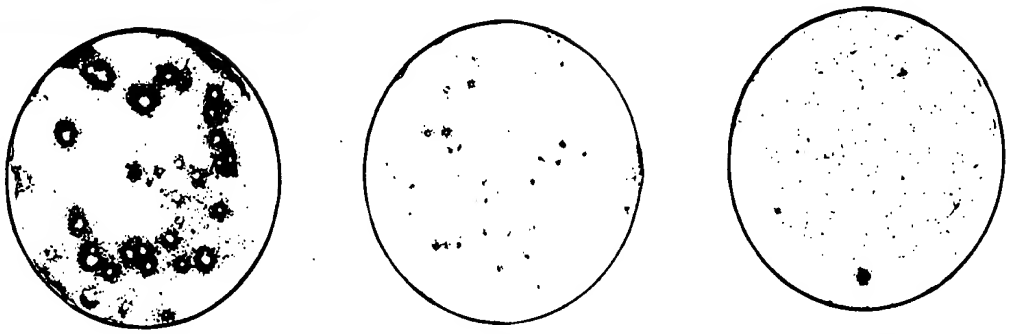
```
       1                                                                                                  100
CP7-5A guauacgagguuaggcaaguucucguauacauauuggacacucuaaaaaauaauuaggccuaggggacaaaaauccuccuuagcgaaggccgaaaagaggc
Δ5-73                                                                              GUAUCCUCCUUAGCGAAGGCCGAAAAGAGGC
M1                                                                               GUAUAUCCUCCUUAGCGAAGGCCGAAAAGAGGC
M2                                                                              GUAUCCUCCUCCUUAGCGAAGGCCGAAAAGAGGC
                                                                                     ***************************
```

Fig. 6

A

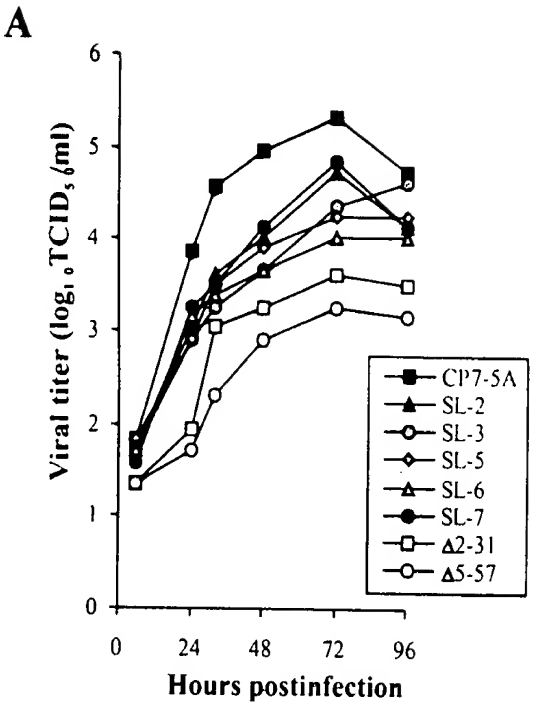
	CP7-5A	SL-2	SL-3	SL-5	SL-6	SL-7	SL-8	Δ2-31	Δ5-57
Plaque size (mm)	2.7	1.2	0.7	1.2	0.8	1.4	0.5	0.8	0.8

B



CP7-5A SL-7 SL-8

Figure 7



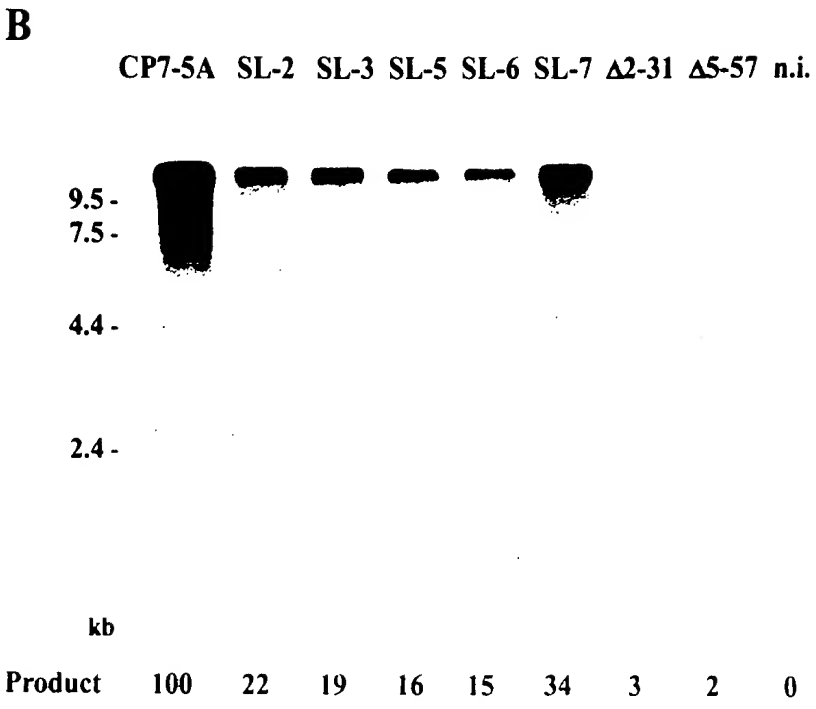


Fig. 8